WSCF Laboratory
PO Box 650 S3-30
Richland, WA 99352

December 10, 2012

Scot Fitzgerald
CH2M-HILL PRC
PO Box 1600
Richland, WA 99352

Dear Scot Fitzgerald,

FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF121506

Reference: (1) SOW, Mod 2, #36587, Release 3
(2) MSC-SD-CD-QAPP-017, current version, Waste Sampling & Characterization Facility Quality Assurance Program Plan

This letter contains the following information for sample delivery group WSCF121506

* Cover Sheet (Attachment 1)
* Narrative (Attachment 2)
* Analytical Results (Attachment 3)
* Sample Receipt Information (Attachment 4)

Very truly yours,

Electronically signed by Joseph Hale
For Lab Manager, Dan T. Smith
WSCF Analytical Lab
(509) 373-4804

Attachments 4

CC: w/Attachments

File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF121506
Data Deliverable Date 12/28/12

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
S13-012	B2MYJ0	121506001	WATER	11/27/12	11/27/12
S13-012	B2MY95	121506002	WATER	11/27/12	11/27/12
S13-012	B2MYK1	121506003	WATER	11/27/12	11/27/12
S13-012	B2MY96	121506004	WATER	11/27/12	11/27/12
S13-012	B2MYH3	121506005	WATER	11/27/12	11/27/12
S13-011	B2N2V5	121506006	WATER	11/27/12	11/27/12

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Attachment 2
Narrative
WSCF121506

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

The following generic data qualifiers (i.e., B, C, D, J and U) may be applicable to this report, as appropriate.

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **C** – Analyte was detected in the blank and was evaluated. Affected sample results in the batch were C flagged (applies to inorganic and wet chemical analyses).
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **B (organic analyses)** – Analyte was detected in the blank and was evaluated. Affected sample results in the batch were B flagged.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report* for a complete listing of approved analytical methods.

Inorganic Comments

Attachment 2
Narrative
WSCF121506

Anions – Hold time requirements for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

We certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the Analytical Laboratory Manager (or designee) and the Client Services representative as verified by electronic signatures shown on the WSCF ANALYTICAL RESULTS REPORT.

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 13 pages
Including cover page

WSCF ANALYTICAL RESULTS REPORT

For

CH2M Hill Plateau Remediation

PO Box 1600
Richland, WA 99352

Attention: Scot Fitzgerald

Contract #	MOA-FH-CHPRC-2008
Group #	WSCF121506
Report Date	December 10, 2012

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Marisol Avila

Solid samples results that have a 'Percent Solid' test are reported on a "dry weight basis", except results of TCLP, Percent Solid, and Total Activity. If no `Percent Solid' test is reported then the results are reported on an "as received" basis.

This information is intended for the use of the addressee only. If the reader of this report is not the intended recipient or is not authorized by the recipient to receive the report, you are hereby notified that any dissemination, distribution or copying of this report is strictly prohibited. If you have received this report in error, please notify WSCF Laboratory immediately by telephone at (509) 373-7005. Information designation of this report is the responsibility of the customer.

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210823	210823	2	BLANK	85595	BLANK		Anions by Ion Chromatography (Water)
210823	210823	3	LCS	85596	LCS		Anions by Ion Chromatography (Water)
210823	210823	4	DUP	85597	B2MKW9(121503005DUP	121503005	Anions by Ion Chromatography (Water)
210823	210823	5	MS	85598	B2MKW9(121503005MS)	121503005	Anions by Ion Chromatography (Water)
210823	210823	6	MSD	85599	B2MKW9(121503005MS	121503005	Anions by Ion Chromatography (Water)
210823	210823	9	SAMPLE	121506001	B2MYJ0		Anions by Ion Chromatography (Water)
210823	210823	10	SAMPLE	121506002	B2MY95		Anions by Ion Chromatography (Water)
210823	210823	11	SAMPLE	121506003	B2MYK1		Anions by Ion Chromatography (Water)
210823	210823	12	SAMPLE	121506004	B2MY96		Anions by Ion Chromatography (Water)
210823	210823	13	SAMPLE	121506005	B2MYH3		Anions by Ion Chromatography (Water)
210823	210823	14	SAMPLE	121506006	B2N2V5		Anions by Ion Chromatography (Water)

Method Reference

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory, industry methods or HEIS methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-533-410	Anion Analysis by Ion Chromatography		
	EPA-600/R-94-111	300.0	Determination of Inorganic Anions by Ion Chromatography
	HEIS	300.0_ANIONS_IC	Determination of Inorganic Anions by Ion Chromatography

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

WSCF Analytical Results Report

DECEMBER 10, 2012

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Sample # 121506001
SAF# S13-012
Sample ID B2MYJ0

Matrix WATER
Sampled 11/27/12
Received 11/27/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/27/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	BD	0.0786		ug/mL	2	0.046	0.14	11/27/12
Chloride	16887-00-6	LA-533-410	D	3.33		ug/mL	2	0.12	0.81	11/27/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Nitrate-N	NO3-N	LA-533-410	D	1.12		ug/mL	2	0.038	0.20	11/27/12
Sulfate	14808-79-8	LA-533-410	D	19.7		ug/mL	2	0.22	2.1	11/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

WSCF Analytical Results Report

DECEMBER 10, 2012

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Sample # 121506002
SAF# S13-012
Sample ID B2MY95

Matrix WATER
Sampled 11/27/12
Received 11/27/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/27/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	UD	<0.046		ug/mL	2	0.046	0.14	11/27/12
Chloride	16887-00-6	LA-533-410	UD	<0.12		ug/mL	2	0.12	0.81	11/27/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Bromide	24959-67-9	LA-533-410	UD	<0.22		ug/mL	2	0.22	0.96	11/27/12
Nitrate-N	NO3-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Phosphate-P	PO4-P	LA-533-410	UD	<0.084		ug/mL	2	0.084	0.72	11/27/12
Sulfate	14808-79-8	LA-533-410	UD	<0.22		ug/mL	2	0.22	2.1	11/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

WSCF Analytical Results Report

DECEMBER 10, 2012

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Sample # 121506003
SAF# S13-012
Sample ID B2MYK1

Matrix WATER
Sampled 11/27/12
Received 11/27/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/27/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	BD	0.0871		ug/mL	2	0.046	0.14	11/27/12
Chloride	16887-00-6	LA-533-410	D	19.1		ug/mL	2	0.12	0.81	11/27/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Bromide	24959-67-9	LA-533-410	UD	<0.22		ug/mL	2	0.22	0.96	11/27/12
Nitrate-N	NO3-N	LA-533-410	D	6.34		ug/mL	2	0.038	0.20	11/27/12
Phosphate-P	PO4-P	LA-533-410	UD	<0.084		ug/mL	2	0.084	0.72	11/27/12
Sulfate	14808-79-8	LA-533-410	D	158		ug/mL	2	0.22	2.1	11/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

WSCF Analytical Results Report

DECEMBER 10, 2012

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Sample # 121506004
SAF# S13-012
Sample ID B2MY96

Matrix WATER
Sampled 11/27/12
Received 11/27/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/27/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	BD	0.0829		ug/mL	2	0.046	0.14	11/27/12
Chloride	16887-00-6	LA-533-410	D	16.1		ug/mL	2	0.12	0.81	11/27/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Bromide	24959-67-9	LA-533-410	UD	<0.22		ug/mL	2	0.22	0.96	11/27/12
Nitrate-N	NO3-N	LA-533-410	D	7.03		ug/mL	2	0.038	0.20	11/27/12
Phosphate-P	PO4-P	LA-533-410	UD	<0.084		ug/mL	2	0.084	0.72	11/27/12
Sulfate	14808-79-8	LA-533-410	D	155		ug/mL	2	0.22	2.1	11/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

WSCF Analytical Results Report

DECEMBER 10, 2012

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Sample # 121506005
SAF# S13-012
Sample ID B2MYH3

Matrix WATER
Sampled 11/27/12
Received 11/27/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/27/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	BD	0.0960		ug/mL	2	0.046	0.14	11/27/12
Chloride	16887-00-6	LA-533-410	D	15.3		ug/mL	2	0.12	0.81	11/27/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Bromide	24959-67-9	LA-533-410	UD	<0.22		ug/mL	2	0.22	0.96	11/27/12
Nitrate-N	NO3-N	LA-533-410	D	5.90		ug/mL	2	0.038	0.20	11/27/12
Phosphate-P	PO4-P	LA-533-410	UD	<0.084		ug/mL	2	0.084	0.72	11/27/12
Sulfate	14808-79-8	LA-533-410	D	152		ug/mL	2	0.22	2.1	11/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

WSCF Analytical Results Report

DECEMBER 10, 2012

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Sample # 121506006
SAF# S13-011
Sample ID B2N2V5

Matrix WATER
Sampled 11/27/12
Received 11/27/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/27/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	BD	0.0587		ug/mL	2	0.046	0.14	11/27/12
Chloride	16887-00-6	LA-533-410	D	19.5		ug/mL	2	0.12	0.81	11/27/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/27/12
Bromide	24959-67-9	LA-533-410	UD	<0.22		ug/mL	2	0.22	0.96	11/27/12
Nitrate-N	NO3-N	LA-533-410	D	8.52		ug/mL	2	0.038	0.20	11/27/12
Phosphate-P	PO4-P	LA-533-410	UD	<0.084		ug/mL	2	0.084	0.72	11/27/12
Sulfate	14808-79-8	LA-533-410	D	159		ug/mL	2	0.22	2.1	11/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Analytical Batch 210823 (QC Batch: 210823) **Test** Anions by Ion Chromatography (Water)
Associated Samples 121506001, 121506002, 121506003, 121506004, 121506005, 121506006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85595**							
Fluoride	16984-48-8		<0.023	ug/mL					U	11/27/12
Chloride	16887-00-6		<0.058	ug/mL					U	11/27/12
Nitrite-N	NO2-N		<0.019	ug/mL					U	11/27/12
Bromide	24959-67-9		<0.11	ug/mL					U	11/27/12
Nitrate-N	NO3-N		<0.019	ug/mL					U	11/27/12
Phosphate-P	PO4-P		<0.042	ug/mL					U	11/27/12
Sulfate	14808-79-8		<0.11	ug/mL					U	11/27/12
LCS			**QC Sample #85596**							
Fluoride	16984-48-8		0.949	ug/mL	95.8	90 - 110				11/27/12
Chloride	16887-00-6		1.86	ug/mL	93.8	90 - 110				11/27/12
Nitrite-N	NO2-N		0.991	ug/mL	101.3	90 - 110				11/27/12
Bromide	24959-67-9		3.91	ug/mL	99.8	90 - 110				11/27/12
Nitrate-N	NO3-N		0.886	ug/mL	100	90 - 110				11/27/12
Phosphate-P	PO4-P		1.91	ug/mL	100.1	90 - 110				11/27/12
Sulfate	14808-79-8		3.96	ug/mL	101.1	90 - 110				11/27/12
DUP			**QC Sample #85597**							
			Original 121503005							

* - QC result out of range n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoride	16984-48-8		<0.046	ug/mL			11.30	20	UD	11/27/12
Chloride	16887-00-6		0.781	ug/mL			0.40	20	BD	11/27/12
Nitrite-N	NO2-N		0.0549	ug/mL			1.80	20	BD	11/27/12
Bromide	24959-67-9		<0.22	ug/mL			0.00	20	UD	11/27/12
Nitrate-N	NO3-N		0.260	ug/mL			0.20	20	D	11/27/12
Phosphate-P	PO4-P		<0.084	ug/mL			0.00	20	UD	11/27/12
Sulfate	14808-79-8		14.1	ug/mL			0.70	20	D	11/27/12
MS			**QC Sample #85598**							
			Original 121503005							
Fluoride	16984-48-8		0.950	ug/mL	95	80 - 120			D	11/27/12
Chloride	16887-00-6		1.84	ug/mL	91.8	80 - 120			D	11/27/12
Nitrite-N	NO2-N		0.912	ug/mL	92.3	80 - 120			D	11/27/12
Bromide	24959-67-9		4.01	ug/mL	101.2	80 - 120			D	11/27/12
Nitrate-N	NO3-N		0.899	ug/mL	100.5	80 - 120			D	11/27/12
Phosphate-P	PO4-P		1.96	ug/mL	101.5	80 - 120			D	11/27/12
Sulfate	14808-79-8		3.96	ug/mL	100	80 - 120			D	11/27/12
MSD			**QC Sample #85599**							
			Original 121503005					**Paired**	**85598**	
Fluoride	16984-48-8		0.922	ug/mL	92.2	80 - 120	3.10	20	D	11/27/12
Chloride	16887-00-6		1.82	ug/mL	90.9	80 - 120	0.70	20	D	11/27/12
Nitrite-N	NO2-N		0.896	ug/mL	90.7	80 - 120	1.70	20	D	11/27/12
Bromide	24959-67-9		3.99	ug/mL	100.9	80 - 120	0.40	20	D	11/27/12
Nitrate-N	NO3-N		0.895	ug/mL	100.1	80 - 120	0.30	20	D	11/27/12
Phosphate-P	PO4-P		1.92	ug/mL	99.4	80 - 120	2.20	20	D	11/27/12

* - QC result out of range n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121506

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Sulfate	14808-79-8		3.71	ug/mL	93.8	80 - 120	1.40	20	D	11/27/12

* - QC result out of range

n/a - Not Applicable

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 8 pages
Including cover page

Waste Sampling and Characterization Facility
P.O. Box 1970 S3-30, Richland WA 99352
Phone: (509) 373-7004/FAX: (509) 373-7134

ACKNOWLEDGEMENT OF SAMPLES RECEIVED

WSCF Laboratory
PO Box 650 S3-30
Richland, WA 99352

ATTN: Scot Fitzgerald

Customer Code: CHPRC
PO #: 401647
Work Order #: 121506
Profile #: S13-012-288
Proj. Mgr.:
Phone:

The following samples were received from you on 11/27/2012 3:10:00 PM. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample #	Sample ID	Matrix	Collected	Received
		Tests scheduled		
121506001	B2MYJ0	WATER	11/27/2012 12:16	11/27/2012 15:10
		IC-W		
121506002	B2MY95	WATER	11/27/2012 07:15	11/27/2012 15:10
		IC-W		
121506003	B2MYK1	WATER	11/27/2012 14:02	11/27/2012 15:10
		IC-W		
121506004	B2MY96	WATER	11/27/2012 09:22	11/27/2012 15:10
		IC-W		
121506005	B2MYH3	WATER	11/27/2012 10:23	11/27/2012 15:10
		IC-W		
121506006	B2N2V5	WATER	11/27/2012 11:31	11/27/2012 15:10
		IC-W		

Test Acronym Description

Test Acronym	Description
IC-W	Anions by IC (W)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S13-012-288**

Page 1 of 1

Collector	Robert Crow	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	S13-012	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	SURV, DECEMBER 2012	**Logbook No.**	HNF-N-506 49 / 84	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	SURV	**Priority:**	31 Days **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

121506

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG. Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MYJ0 1	N	W	11-27-12	1216	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	48 Hours	Cool~4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Robert Crow	R Crow	NOV 27 2012 1510	(A) Hudson		NOV 27 2012 1510
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S13-012-254**

Page 1 of 1

Collector	Robert Crow	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	S13-012	**Sampling Origin**	Hanford Site 9211-27-12	**Purchase Order/Charge Code**	300071ES20
Project Title	SURV, DECEMBER 2012	**Logbook No.**	HNF-N-506 49 / ~~85~~ 84	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	SURV	**Priority:**	31 Days **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG. Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MY95 2	N	W	112712	0715	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Robert Crow	R Crow	NOV 27 2012 1510	A Hudson		NOV 27 2012 1510
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S13-012-295**

Page 1 of 1

Collector	Robert Crow	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	S13-012	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	SURV, DECEMBER 2012	**Logbook No.**	HNF-N-506 49 / 84	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	SURV	**Priority:**	31 Days **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG. Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MYK1 3	N	W	11-27-12	1402	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Robert Crow	R Crow	NOV 27 2012 1510	CA Hudson		NOV 27 2012 1510

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S13-012-256**

Page 1 of 1

Collector	Robert Crow	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	S13-012	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	SURV, DECEMBER 2012	**Logbook No.**	HNF-N-506 49 / 84	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	SURV	**Priority:**	**31 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG. Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MY96 4	N	W	11-27-12	0922	1x500 mL P	300.0_ANIONS_IC: List 1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Robert Crow	R Crow	NOV 27 2012 1510	[illegible]		NOV 27 2012 1510
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S13-012-283**

Page 1 of 1

Collector	Robert Crow	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	S13-012	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	SURV, DECEMBER 2012	**Logbook No.**	HNF-N-506 49 / 84	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	SURV	**Priority:**	**31 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG. Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MYH3 5	N	W	11-27-12	1023	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Robert Crow	R Crow		NOV 27 2012 1510				NOV 27 2012 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S13-011-322**

Page 1 of 1

Collector	Robert Crow	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	S13-011	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	SURV, NOVEMBER 2012	**Logbook No.**	HNF-N-506 49/84	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	CERCLA	**Priority:**	**31 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG. Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2N2V5	N	W	11-27-12	1131	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Robert Crow	R Crow	NOV 27 2012 1510	CA Hudson		NOV 27 2012 1510
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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